

a first brake pedal being biased to a disengaged position and being movable to an engaged position in which the first brake element contacts the first auxiliary wheel assembly.

3. The self-balancing board of claim 2, wherein the first brake pedal is coupled to the platform via a mechanical hinge.

4. The self-balancing board of claim 2, wherein the first brake pedal is coupled to the platform via a living hinge.

5. The self-balancing board of claim 1, wherein the first brake element comprises a first brake pad, the first brake element being linearly biased away from the first auxiliary wheel assembly, and wherein the first brake element can be manually urged towards the first auxiliary wheel assembly to cause the first brake pad to come into contact with the first auxiliary wheel assembly.

6. The self-balancing board of claim 1, wherein the first auxiliary wheel assembly is biased away from the platform, and wherein pressure applied to the platform proximal to the first auxiliary wheel assembly when the first auxiliary wheel assembly urges the first auxiliary wheel assembly into contact with the first brake element.

7. The self-balancing board of claim 1, wherein the first auxiliary wheel assembly comprises:

- a first auxiliary wheel; and
- a first braking surface.

8. The self-balancing board of claim 7, wherein the first brake element engages the first braking surface to provide resistance to rotation of the first auxiliary wheel assembly.

9. The self-balancing board of claim 1, further comprising:

- a second auxiliary wheel assembly coupled to the platform distal the primary wheel assembly, the second auxiliary wheel assembly being elevated from contacting the flat surface when the foot deck is parallel to the flat surface; and
- a second brake element that is manually movable relative to the second auxiliary wheel assembly to engage the second auxiliary wheel assembly to provide resistance to rotation of the second auxiliary wheel assembly.

10. The self-balancing board of claim 9, further comprising:

- a second brake pedal being biased to a disengaged position and being movable to an engaged position in which the second brake element contacts the second auxiliary wheel assembly.

11. The self-balancing board of claim 10, wherein the second brake pedal is coupled to the platform via a mechanical hinge.

12. The self-balancing board of claim 10, wherein the second brake pedal is coupled to the platform via a living hinge.

13. The self-balancing board of claim 8, wherein the second brake element comprises a second brake pad, the second brake element being linearly biased away from the second auxiliary wheel assembly, and wherein the second brake element can be manually urged towards the second

auxiliary wheel assembly to cause the second brake pad to come into contact with the second auxiliary wheel assembly.

14. The self-balancing board of claim 8, wherein the second auxiliary wheel assembly is biased away from the platform, and wherein pressure applied to the platform proximal to the second auxiliary wheel assembly when the second auxiliary wheel assembly urges the second auxiliary wheel assembly into contact with the second brake element.

15. The self-balancing board of claim 1, further comprising a handle bar secured to the platform.

16. The self-balancing board of claim 1, wherein the first auxiliary wheel assembly is positioned proximate a front end of the platform, and wherein the self-balancing board further comprises:

- a second auxiliary wheel assembly coupled to the platform proximate a rear end of the platform, the second auxiliary wheel assembly being elevated from contacting the flat surface when the foot deck is parallel to the flat surface, and being engaged with the flat surface upon which the primary wheel rests when the foot deck is tilted by a selected angle, so as to cooperate with the primary wheel to support the self-balancing board on the flat surface.

17. The self-balancing board of claim 16, further comprising a second brake element that is manually movable relative to the second auxiliary wheel assembly to engage the second auxiliary wheel assembly to provide resistance to rotation of the second auxiliary wheel assembly.

18. The self-balancing board of claim 16, wherein, during engagement of the second auxiliary wheel assembly with the flat surface the controller decelerates the primary wheel.

17. A self-balancing board, comprising:

- a primary wheel assembly, comprising:
- a primary wheel; and

- a motor driving the primary wheel; <sup>(SEP)</sup>

- a frame secured to the primary wheel assembly and having a rider support structure;

- at least one sensor sensing the orientation of the platform;
- a controller receiving data from the at least one sensor and controlling the motor in response to the received data;

- a first auxiliary wheel assembly coupled to the platform distal the primary wheel assembly, the first auxiliary wheel assembly being elevated from contacting a flat surface upon which the primary wheel rests when the foot deck is parallel to the flat surface, and being engaged with the flat surface upon which the primary wheel rests when the foot deck is tilted by a selected angle, so as to cooperate with the primary wheel to support the self-balancing board on the flat surface without triggering braking by the controller on the primary wheel; and

- a first brake element that is manually movable relative to the first auxiliary wheel assembly to engage the first auxiliary wheel assembly to provide resistance to rotation of the first auxiliary wheel assembly.

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